

PATENT

Attorney Docket No. ATT/2000-0219

**REMARKS**

In view of the following discussion, the Applicants submit that none of the claims now pending in the application is anticipated or made obvious under the provisions of 35 U.S.C. § 102 and § 103. Thus, the Applicants believe that all of these claims are now in allowable form.

**I. REJECTION OF CLAIMS 1-7 AND 9 UNDER 35 U.S.C. § 102**

The Examiner has rejected claims 1-7 and 9 in the Office Action under 35 U.S.C. § 102 as being anticipated by Blum et al. (U.S. published patent application 2003/0048772 A1, Published on March 13, 2003.) Applicants respectfully traverse the rejection.

Blum teaches a communication system architecture in which a hybrid fiber coax (HFC) network utilizing an Internet protocol (IP) through an IP network is connectable to a local digital switch (LDS) within a public switched telephone network (PSTN). An IP digital terminal (IPDT) is provided as the link between the LDS and the IP network, where the IPDT serves to translate both signaling and voice data between the two networks. (See Blum, Abstract, FIG. 2 and Paragraph 0022)

The Examiner's attention is directed to the fact that Blum fails to teach or suggest a method where a Hybrid-Fiber Coax network translates a VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having the capability of processing TDM calls and providing at least one feature for the call, as positively claimed by the Applicants. Specifically, Applicants' amended independent claims 1 and 10 positively recite:

1. A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:  
receiving in a first network a packet-based VoIP call, wherein the first network is a Hybrid-Fiber Coax network;  
translating, in the first network, the VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having the capability of processing TDM calls and providing at least one feature for the call, the translation including the sub-steps of (1) performing required signal processing protocols in the first network to allow the VoIP call to interact with the first

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network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed in the first network into a format suitable for processing by the second network;  
routing the TDM call to the second network;  
processing the TDM call in the second network to perform processing thereon; and  
routing the TDM call to its intended destination. (Emphasis added)

10. A method for providing full-featured Voice-over Internet Protocol (VoIP) telephony service, comprising the steps of:  
receiving in a first network a packet-based VoIP call and non-voice data packet, wherein the first network is a Hybrid-Fiber Coax network;  
separating the non-voice packets from the VoIP call;  
routing the non-voice packets to a data network;  
translating, in the first network, the VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having the capability of processing TDM calls and providing at least one feature for the call, the translation including the sub-steps of (1) performing required signal processing protocols in the first network to allow the VoIP call to interact with the first network as if the first network was performing switch-based processing functions and (2) mapping IP signaling information developed in the first network into a format suitable for processing by the second network;  
routing the TDM call to the second network;  
processing the TDM call in the second network to perform processing thereon; and  
routing the TDM call to its intended destination. (Emphasis added)

Applicants' invention teaches a method where a cable television service provider may provide fully-featured VoIP telephony service without having to perform the requisite call processing in the cable television service provider's Hybrid-Fiber Coax (HFC) network. To achieve this goal, Applicants' invention teaches the use of an Internet Protocol Digital Terminal (IPDT) within the HFC network for translating a VoIP call into a TDM format and performs the signaling protocol support functions and the required mapping to allow routing of the call to the PSTN for processing. In other words, Applicants' Internet Protocol Digital Terminal (IPDT) performs the translation within the Hybrid-Fiber Coax (HFC) network and communicates directly with the PSTN. (See Applicant's specification, Paragraphs 0026 and 0027 and FIG. 1.)

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In contrast, Blum employs an Internet Protocol Digital Terminal 200 within an IP network 120, where the IP network is disposed between the HFC network 140 and the local digital switch 210 of the PSTN 100. Blum states that:

The IPDT 200 connects the IP network 120 to a Local Digital Switch (LDS) 210 of the PSTN (not shown here).... The IPDT 200 is capable of translating both call signaling packets and voice packets on the IP network 120 to their appropriate counterparts on the LDS 210. (See Blum, Paragraph 0022)

As such, Blum clearly fails to teach or anticipate Applicants' invention as positively claimed in Applicants' amended independent claims 1 and 10, where the translation is performed within the HFC network and not in the IP network. In fact, Blum teaches away from Applicants' invention because Blum teaches the use of an intermediate IP network between the HFC network and the PSTN. Applicants respectfully submit that claims 1 and 10 are not anticipated by Blum.

Dependent claims 2-5, 7, and 9 depend from claim 1 and recite additional limitation, respectively. As such, and for the exact same reason set forth above, the Applicants submit that claims 2-5, 7, and 9 are also not anticipated by the teachings of Blum. Therefore, the Applicants submit that claims 2-5, 7, and 9, as they now stand, fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder.

It should be noted that amended independent claims 1 and 10 are actually original dependent claims 6 and 15 rewritten into independent claim format. As such, claims 6 and 15 have been canceled without prejudice.

## **II. REJECTION OF CLAIMS 8, AND 10-18 UNDER 35 U.S.C. § 103**

### **A. Claim 8**

The Examiner has rejected claim 8 in the Office Action under 35 U.S.C. § 103 as being unpatentable over Blum et al. (U.S. published patent application 2003/0048772 A1, Published on March 13, 2003.) in view of Chow et al. (US patent 6,771,953, issued August 3, 2004) Applicants respectfully traverse the rejection.

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As Chow was filed on December 13, 1999 and issued August 3, 2004 after the Applicants' September 28, 2001 filing date, Chow is a 102(e) type reference. Chow was assigned to AT&T Corp. (See assignee name on first page of the Chow patent).

The Applicants' invention is also assigned to AT&T Corp, and was recorded on September 28, 2001 (reel/frame 012233/0292) and again on May 23, 2002 (reel/frame 012918/0327) (See enclosed Notices of Recordation). Thus, the Applicants' invention and Chow were commonly assigned at the time of the Applicants' invention. Since this application was filed on or after November 29, 1999, Chow does not preclude patentability under the provisions of 35 U.S.C. § 103(c), as amended by the American Inventors Protection Act of 1999. See MPEP 706.02(I)(1).

Therefore, the combination of Blum and Chow is not a proper rejection against Applicants' invention as recited in claim 8. As such, the Applicants respectfully request the rejection be withdrawn.

#### **Claims 10-16, 18**

The Examiner has rejected claims 10-16, and 18 in the Office Action under 35 U.S.C. § 103 as being unpatentable over Blum et al. (U.S. published patent application 2003/0048772 A1, Published on March 13, 2003.) in view of Li et al. (U.S. published patent application 2004/0213205 A1, Published on October 28, 2004.) Applicants respectfully traverse the rejection.

Blum has been discussed above. Li teaches a voice packet switched system. Specifically Li teaches a switching system that provides end-to-end voice switching. (See Li, Paragraph 0004.)

The Examiner's attention is again directed to the fact that Blum and Li (either singly or in any permissible combination) fails to teach or suggest a method where a Hybrid-Fiber Coax network translates a VoIP call into a Time-Division Multiplexed (TDM) call compatible with a second network having the capability of processing TDM calls and providing at least one feature for the call, as positively claimed by the Applicants. The significant gap left by Blum as discussed above is not bridged by Li. Specifically, Li also fails to teach or suggest the use of an Internet Protocol Digital Terminal (IPDT) within the HFC network for translating a VoIP call into a TDM format

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and performs the signaling protocol support functions and the required mapping to allow routing of the call to the PSTN for processing. As such, the alleged combination of Blum and Li fails to make obvious Applicants' amended independent claim 10.

Dependent claims 11-14, 16 and 18 depend from claim 10 and recite additional limitation, respectively. As such, and for the exact same reason set forth above, the Applicants submit that claims 11-14, 16 and 18 are also not made obvious by the teachings of Blum and Li. Therefore, the Applicants submit that claims 11-14, 16 and 18, as they now stand, fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

### C. Claim 17

The Examiner has rejected claim 17 in the Office Action under 35 U.S.C. § 103 as being unpatentable over Blum et al. (U.S. published patent application 2003/0048772 A1, Published on March 13, 2003.) in view of Li et al. (U.S. published patent application 2004/0213205 A1, Published on October 28, 2004.) and further in view of Chow et al. (US patent 6,771,953, issued August 3, 2004) Applicants respectfully traverse the rejection.

As Chow was filed on December 13, 1999 and issued August 3, 2004 after the Applicants' September 28, 2001 filing date, Chow is a 102(e) type reference. Chow was assigned to AT&T Corp. (See assignee name on first page of the Chow patent).

The Applicants' invention is also assigned to AT&T Corp, and was recorded on September 28, 2001 (reel/frame 012233/0292) and again on May 23, 2002 (reel/frame 012918/0327) (See enclosed Notices of Recordation). Thus, the Applicants' invention and Chow were commonly assigned at the time of the Applicants' invention. Since this application was filed on or after November 29, 1999, Chow does not preclude patentability under the provisions of 35 U.S.C. § 103(c), as amended by the American Inventors Protection Act of 1999. See MPEP 706.02(I)(1).

Therefore, the combination of Blum, Li and Chow is not a proper rejection against Applicants' invention as recited in claim 17. As such, the Applicants respectfully request the rejection be withdrawn.

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**III. AMENDMENT OF CLAIMS**

Applicants also amended claims 8, 12, and 17. These amendments were made to address antecedent basis issues and to better claim or clarify Applicants' invention. These amendments were not made in response to the cited references.

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**CONCLUSION**

Thus, the Applicants submit that all of these claims now fully satisfy the requirements of 35 U.S.C. § 102 and § 103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly requested.

If, however, the Examiner believes that there are any unresolved issues requiring the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Kin-Wah Tong, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

7/18/05

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